

High-level block diagram

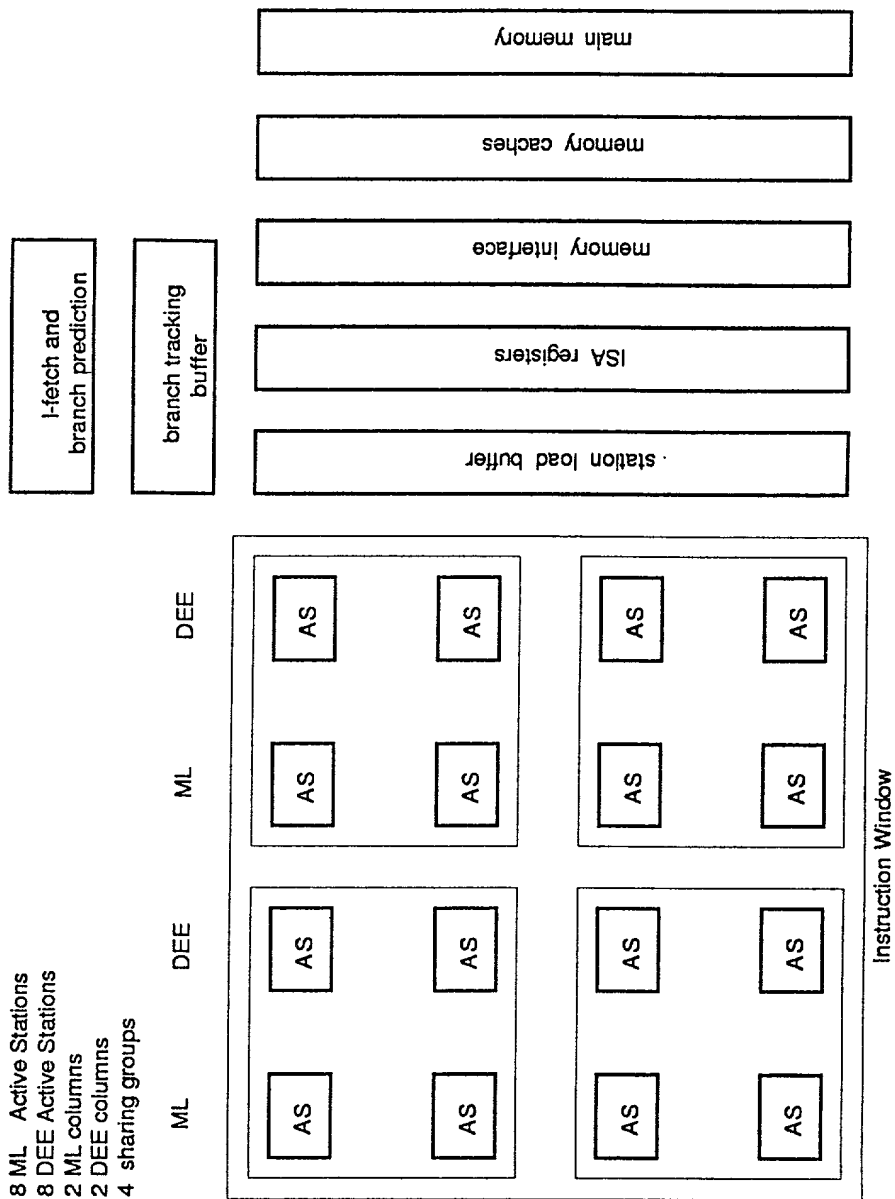


FIG. 2

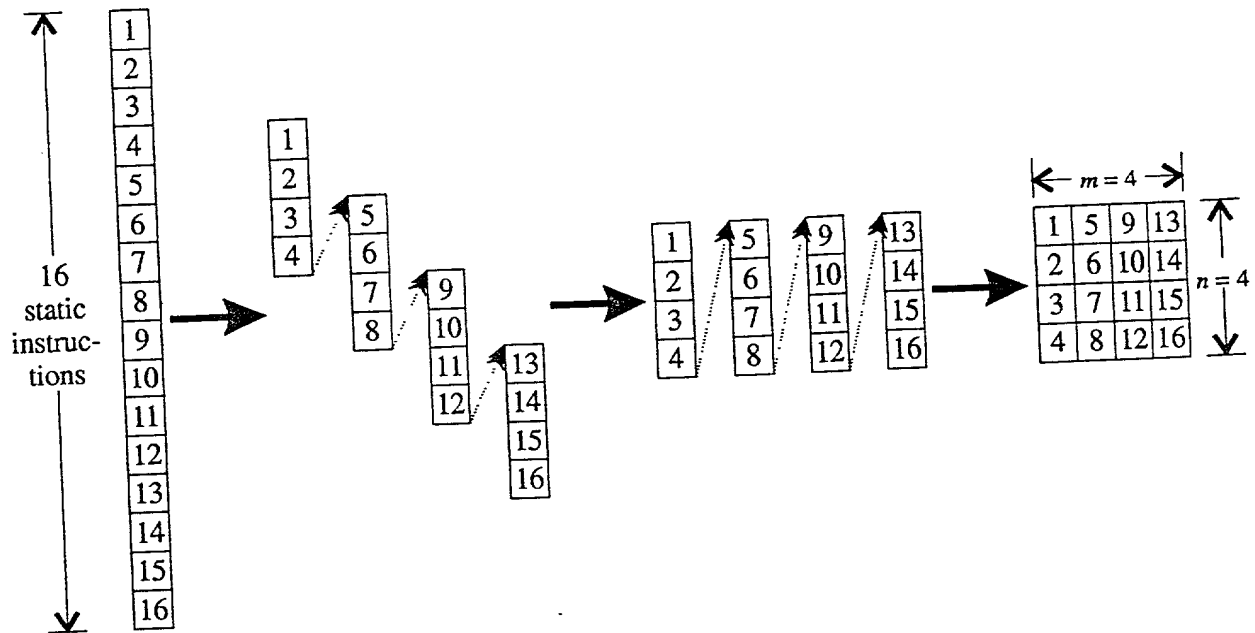
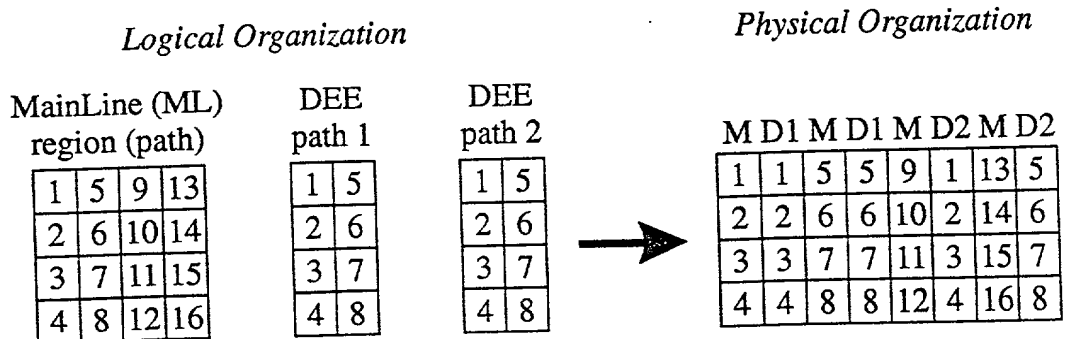


FIG. 3



Instruction Window (IW), with Disjoint Eager Execution (DEE)
- each square is an active station -

FIG. 4

ISA Architected Register Files

- 8 ML Active Stations
- 8 DEE Active Stations
- 2 ML columns
- 2 DEE columns
- 4 sharing groups

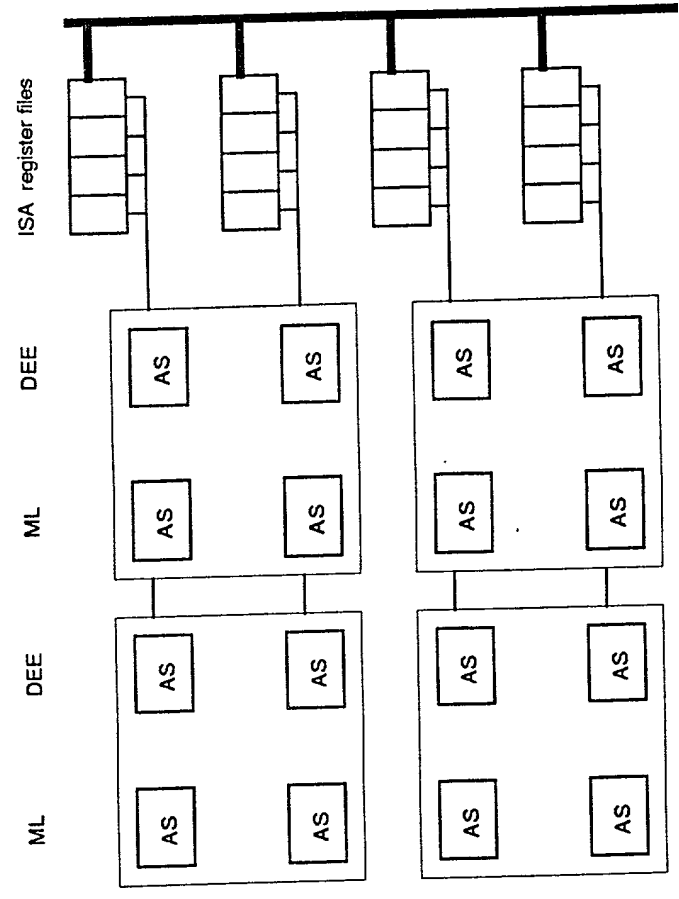


FIG. 5

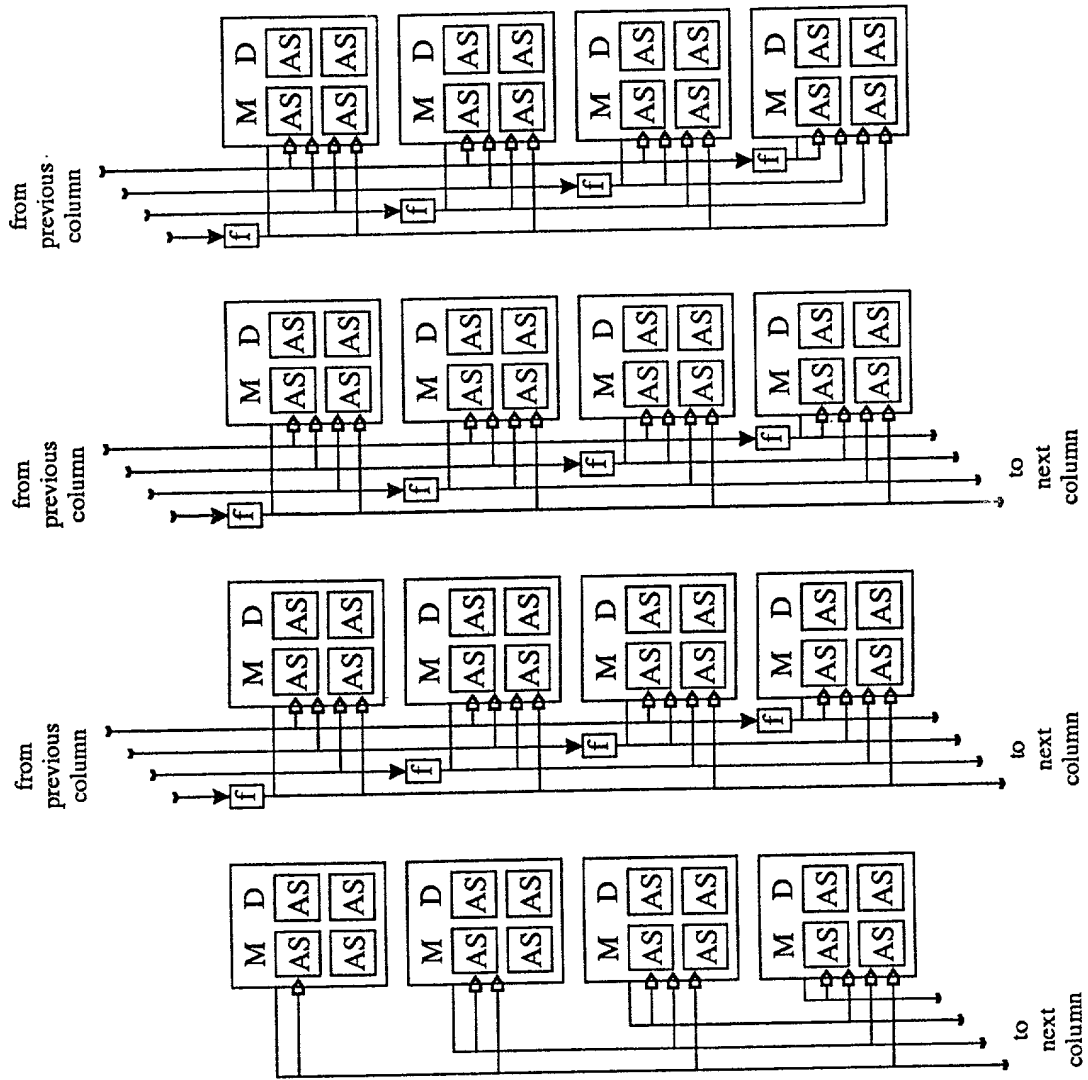
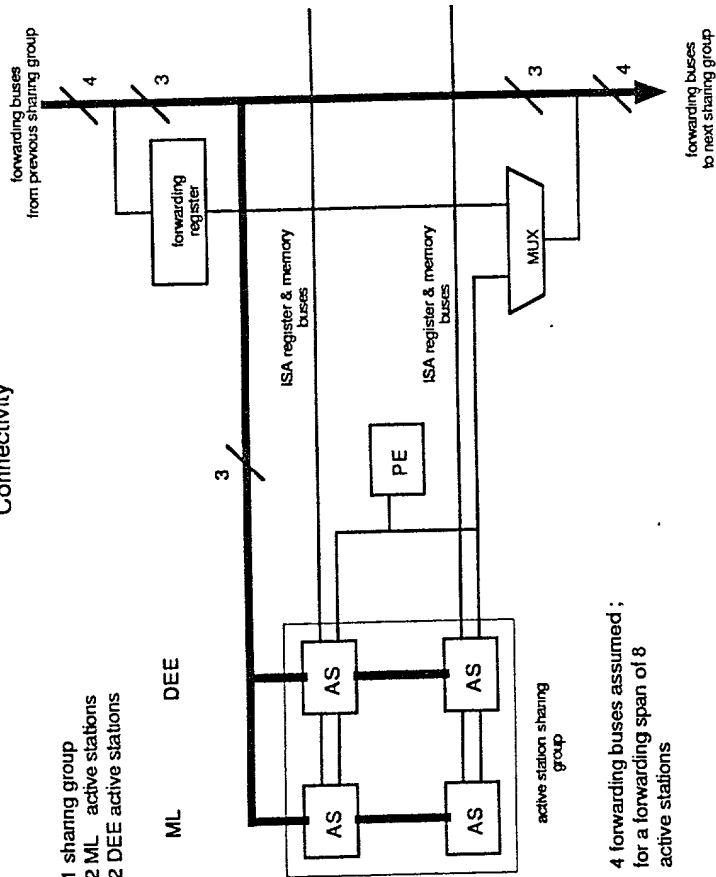


FIG. 7

Active Station Sharing Group and Connectivity

- 1 sharing group
- 2 ML active stations
- 2 DEE active stations

ML DEE



- 4 forwarding buses assumed ;
- for a forwarding span of 8
- active stations

FIG. 8

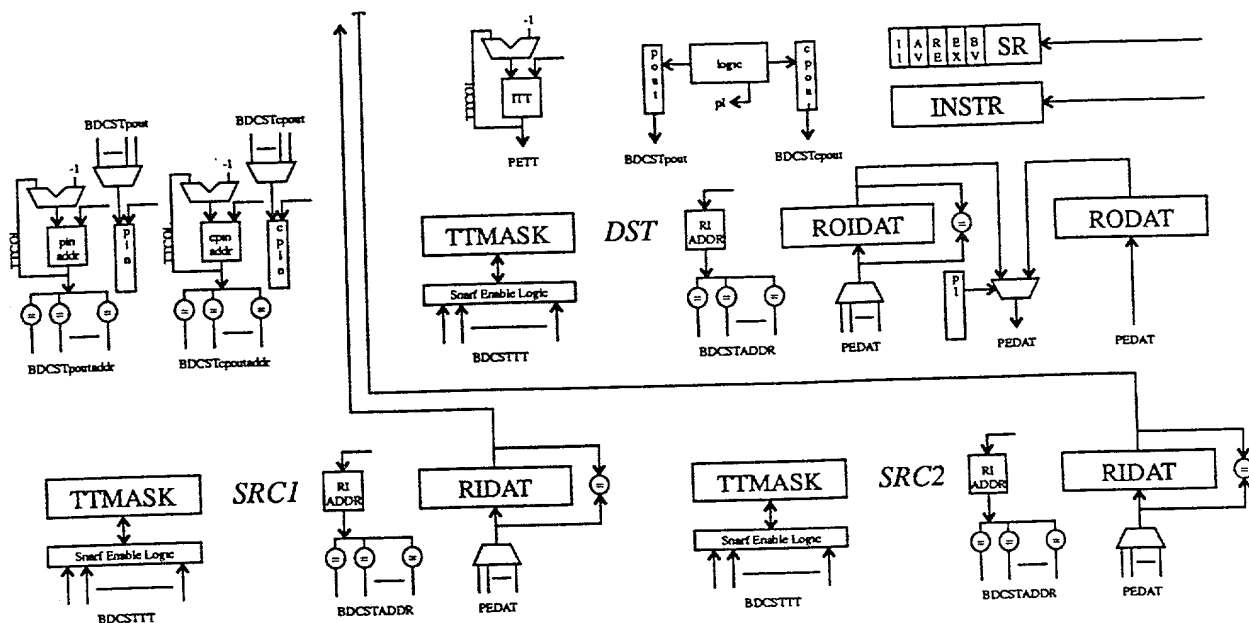


FIG. 9

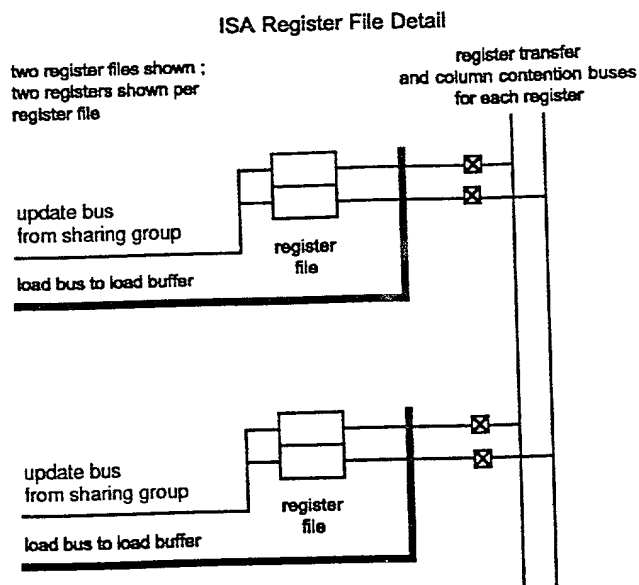


FIG. 10

	time					
instruction	00	X				
	10	X				
	20	X				
	30	X	X			

an 'X' marks an execution

FIG. 11

	time					
instruction	00	X				
	10	X				
	20			X		
	30		X		X	

an 'X' marks an execution

FIG. 12

	time					
instruction	00		X			
	10	X		X		
	20	X				
	30					

an 'X' marks an execution

FIG. 13

	time						
	0	1	2	3	4	5	6
instruction	00		X			X	
	10	X		X			X
	20			X			
	30		X	X		X	

an 'X' marks an execution

FIG. 14

	time						
	0	1	2	3	4	5	6
Instruction 000	X						
010	X		X				
020	X			X			
030	X				X		

an 'X' marks an execution

FIG. 15

	time						
	0	1	2	3	4	5	6
Instruction 00	X						
10	X	X					
20	X		R				
30	X						

an 'X' marks an execution, an 'R' marks a relay operation

FIG. 16

	time						
	0	1	2	3	4	5	6
Instruction 00			X				
10				X			
20	X				R		
30		X				X	

an 'X' marks an execution, an 'R' marks a relay operation

FIG. 17

	time						
	0	1	2	3	4	5	6
Instruction 00	X				X		
10	X	X				X	
20	R		D				B
30	X						

an 'X' marks an execution, an 'R' marks a relay operation, an 'B' marks a broadcast-only operation, a 'D' marks an execution in a DEE path

FIG. 18